

# Staff Report

for the Regular Board of Directors Meeting, May 13, 2020

**TO:** Board of Directors

**FROM:** Marvin Davis, MBA, CPA, Finance Manager/Treasurer  
Robert Porr, JD, CIPMA, Vice President, FRA, Inc.  
Lora Carpenter, CIPMA, Assistant Vice President, FRA, Inc.

**DATE:** May 6, 2020

**SUBJECT:** Financial Market Analysis and Debt Issuance Opportunities

---

---

***FINANCE***

**RECOMMENDATION:**

Hear financial market analysis presentation and debt issuance opportunities, and provide direction as appropriate.

**BACKGROUND:**

At the April 8, 2020 board meeting, the Board requested staff provide an analysis of financial market volatility and potential debt refunding opportunities. Staff secured the services of Fieldman, Rolapp, and Associates, Inc. (FRA) to assist with the presentation and refunding analysis of the District's outstanding debt. FRA was the financial advisor on the District's prior two bond issuances. Due to this firm's knowledge of the District's financial operations, staff is electing to contract with the firm to assist with this analysis. Please see consultant resumes.

Financial Market Implications

The attached charts provide recent changes in the yields for 30-Year US Treasury bonds, the municipal bond market, and the stock market. The District sells its bonds in the primary municipal bond market. Notice that these markets are experiencing extreme levels of volatility. Regarding the District's portfolio investments, approximately \$21 million have been called. The good news is these reserves are being invested in the Local Agency Investment Fund (LAIF), which is currently yielding more than Agency bonds.

Many factors cause volatility in the financial markets, but I believe it is safe to say that currently, the COVID-19 pandemic is definitely the driver. When short-term investments (LAIF, 3-month T-Bills, etc.) are earning virtually the same as long-term investments (5, 10, 30 Year), this means that there is a lack of confidence in the performance of the financial markets in the long-run. In other words, people are more concerned with the return “of their money,” rather than the return “on their money.” If the markets were behaving consistent with fundamental economics, then long-term rates would substantially outperform short-term ones. “The longer you use my money, the more you must compensate me for my lack of enjoyment.”

Refunding or refinancing is recommended when newly issued long-term bonds (the primary market) carry interest rates and yields, which are substantially less than outstanding debt instruments (the secondary market), thus producing a net present value savings. Also, refunding is possible given the call provisions and repayment clauses of the outstanding debt.

### 2016A Revenue Bonds

The District issued \$20.2 million in revenue bonds for 15 years to finance-related projects in 2016. Due to the call features of these bonds, the District cannot refund the bonds prior to March 2026 (10 years from issuance) without issuing taxable bonds. This refinancing approach is known as an advance refunding; essentially, the District would have to escrow the principal and interest payments until the Bonds can legally be called. This approach does not generate any annual debt service savings.

### 2011A Revenue Bonds

The District issued \$25.9 million in revenue bonds for 25 years to finance-related projects and refunded its' 2002 outstanding bonds in 2011. These bonds can be prepaid at any time with the proper noticing, and staff has included potential savings within the 5-Year forecast. The estimated refunding reduces the current annual debt service by approximately \$146,000 if publicly offered and by approximately \$142,000 if privately placed, assuming market conditions as of April 28, 2020. This assumes refunding by September 2020, market conditions remain favorable for the new issues, and District rating remains at least AA-. Also, we are assuming the remaining amortization schedule (15 years) for the refunded bonds.

### State of California Loan (Cement Hill Financing)

The District formed a Community Facility District (CFD) for the Cement Hill development in 2007. Financing was provided through a 20 Year State loan through the California Department of Public Health at 2.284%. As part of funding the project, the Board approved capacity fees to cover roughly 35% of the debt. Currently, the principal balance on the loan is approximately \$5.3 million. The consultants believe the District can refinance this loan at a rate slightly lower than the existing rate to produce marginal annual savings in the amount ranging from

\$10,000 - \$15,000 depending on market conditions. Additionally, if the refunding must be done as a separate transaction, it may not produce annual savings. The CFD is currently assessing 207 parcels. This equates to an approximate maximum annual savings of \$72. The consultants will continue to monitor the savings to determine the feasibility.

### New Debt Issuance

Considering the District's most recent 5-Year Capital Improvement Plan (CIP) and current financial markets, staff recommends issuing new debt in the amount of \$61,725,180 for these projects.

- Scotts Flat Spillway Upgrades \$23,400,00
- Combie Dam Scour & Stability Improvements \$6,750,000
- E. George to LWW Backbone Extension \$19,380,180
- Lake Wildwood Treatment Plant Upgrades \$5,745,000
- Chicago Park Turbine and Generator Rewind \$4,150,000
- Chicago Park Transformer Replacement \$2,300,000

Staff performed preliminary financial scenarios indicating the District can service this additional leverage and successfully operate the Water system in compliance with bond covenants. If the Board decides on this direction, the Official statement will contain a 5-Year forecast where the Board can direct assumptions such as reasonable rate increases, Hydro transfer in amounts, capital program expenditure levels, reserve balances, etc.

We anticipate the administrative and legal process for refunding and new issuance can be completed in approximately four months. Given the market conditions at that time, savings and debt service levels will change. There is a slide providing different debt service levels considering a favorable or unfavorable movement of interest rates at the time of issuance.

### Strategic Goal

Analysis of financial markets and debt issuance opportunities achieves Goal Number 1 of the District's Strategic Plan by demonstrating proactive management of our financial resources.

**BUDGETARY IMPACT:** To be discussed

/MD

Attachments: Financial Market & Debt Analysis, Resumes



**ROBERT A. PORR**

949.660.7323 direct

949.751.8445 cell

rporr@fieldman.com

**Mr. Robert A. Porr, Executive Vice President**, returned to the firm in May 2005 after spending eight years as a public finance investment banker. Since re-joining the firm, he has focused on serving the firm's utility clients. He has been advisor to Silicon Valley Clean Water, Rancho California Water District, Orange County Water District, Western Municipal Water District, Mesa Water District, Santa Clarita Valley Water Agency (formerly Castaic Lake Water Agency), Azusa Light & Water, Westlands Water District, and Olivenhain Municipal Water District. Mr. Porr is part of the swap advisory practice at the Firm and has served as swap advisor to Riverside County Transportation Commission, Eastern Municipal Water District, Santa Clarita Valley Water Agency (formerly Castaic Lake Water Agency), the County of Riverside, Hemet Unified School District, and Western Municipal Water District.

**Mr. Porr has completed more than \$7.6 billion in water revenue financings during his career; approximately \$1 billion has been in connection with variable-rate bonds.** He has structured commercial paper programs for Santa Clarita Valley Water Agency (formerly Castaic Lake Water Agency) and assisted the finance team for Riverside County Transportation Commission with that CP Program; he also structured a credit facility for Merced Irrigation District and is currently working on a structured note program that offers the flexibility of CP, but with greater flexibility at a lower cost. Mr. Porr has structured and completed approximately \$400 million of GO Bonds for water district clients in his career.

His experience as an investment banker includes working with numerous local agencies in connection with the issuance of more than \$1.2 billion in debt. Mr. Porr has assisted issuers with the structure and sale of many forms of debt including general obligation, special tax, assessment, revenue and lease backed debt. He structured nearly \$100 million of complex tax-backed refunding debt for the County of Riverside and developed a novel lease revenue bond structure for the Alaska Industrial Development and Export Authority.

Mr. Porr worked as a finance/marketing representative for Lockheed Martin Finance Corporation. During his time with LMFC, Mr. Porr worked on developing financing structures to support turnkey delivery programs for communication satellites, aircraft and proprietary technology products. Mr. Porr was involved in projects for the People's Republic of China, valued at approximately \$1 billion, and for a consortium of Asian telephony entities valued at nearly \$500 million.

Mr. Porr earned his undergraduate degree in Psychology from Pace University in New York, NY and his Juris Doctorate from New York Law School in New York, NY.

Mr. Porr holds the Series 50 License CIPMA designation as a Certified Independent Professional and is admitted to practice law in the State of New York.



**LORA CARPENTER**

949.660.7312 direct

949.892.8617 cell

[lcarpenter@fieldman.com](mailto:lcarpenter@fieldman.com)

**Ms. Lora Carpenter, Assistant Vice President**, joined the firm in March 2014. Since joining the firm, Ms. Carpenter has been active with the firm's water and wastewater utility clients. She has worked on a variety of transactions which include both Revenue Bonds and Certificates of Participation. She has worked with many of our large water utility clients, including Silicon Valley Clean Water, Orange County Water District, Rancho California Water District and Santa Clarita Valley Water Agency (formerly Castaic Lake Water Agency) conducting credit analysis, preparing credit presentations and analyzing structuring alternatives. She has provided assistance on swap terminations and variable-rate bond structures. Her Mathematics and analytics background provides the essential skill sets when preparing quantitative analyses to support transaction structures and researching relevant market conditions and events.

Ms. Carpenter has previously worked with Cucamonga Valley Water District, Merced Irrigation District, Marina Coast Water District, Olivenhain Municipal Water District, Mojave Water Agency, Dublin San Ramon Services District and Westlands Water District. She manages the technical aspects, transaction flow and implementation of financing strategies and credit analysis.

Ms. Carpenter has familiarity with the organization of Joint Powers Authorities from her work on structuring bond financings for Silicon Valley Clean Water, Santa Rosa Regional Resources Authority, Chino Basin Desalter Authority and Central Coast Water Authority.

Ms. Carpenter also provides non-transactional based financial advisory services to support Firm recommendations, including: financial modeling, long-term financial planning and policy review.

Ms. Carpenter received her Bachelor of Science degree in Mathematics from Bucknell University. She is a registered municipal advisor representative (Series 50 qualified).

---

# Nevada Irrigation District



## Fieldman, Rolapp, and Associates, Inc. for Nevada Irrigation District

Board Meeting

Financial Market Analysis

Refunding and New Money Analysis

May 13, 2020

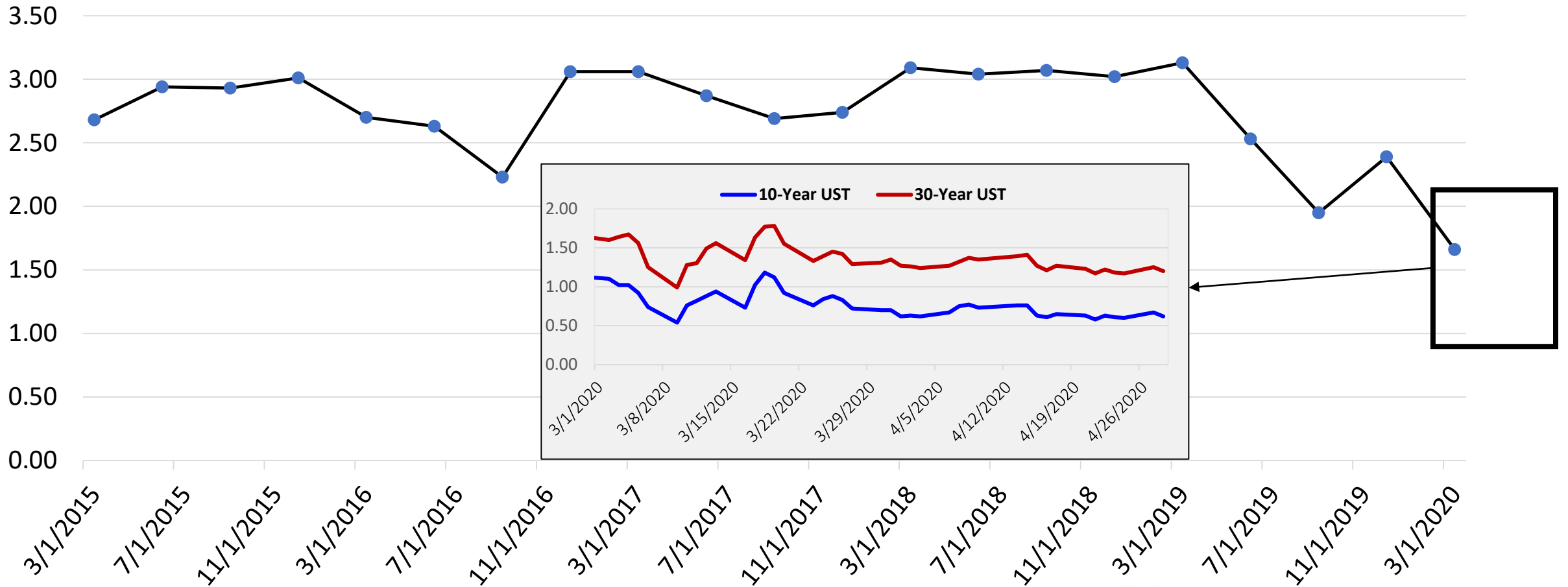
# Fundamental Causes in Recent Market Volatility

---

- Global pandemic in connection with COVID-19 outbreak caused:
  - Investors to flee into safe haven investments – primarily cash and US Treasuries
  - Stock market losses of approximately 30% in value
  - Money flowed out of municipal bond funds
- Various stimulus packages and fiscal policy interventions introduced to provide liquidity (\$2 Trillion) to the municipal and corporate bond markets

# Quarterly US Treasury Yields

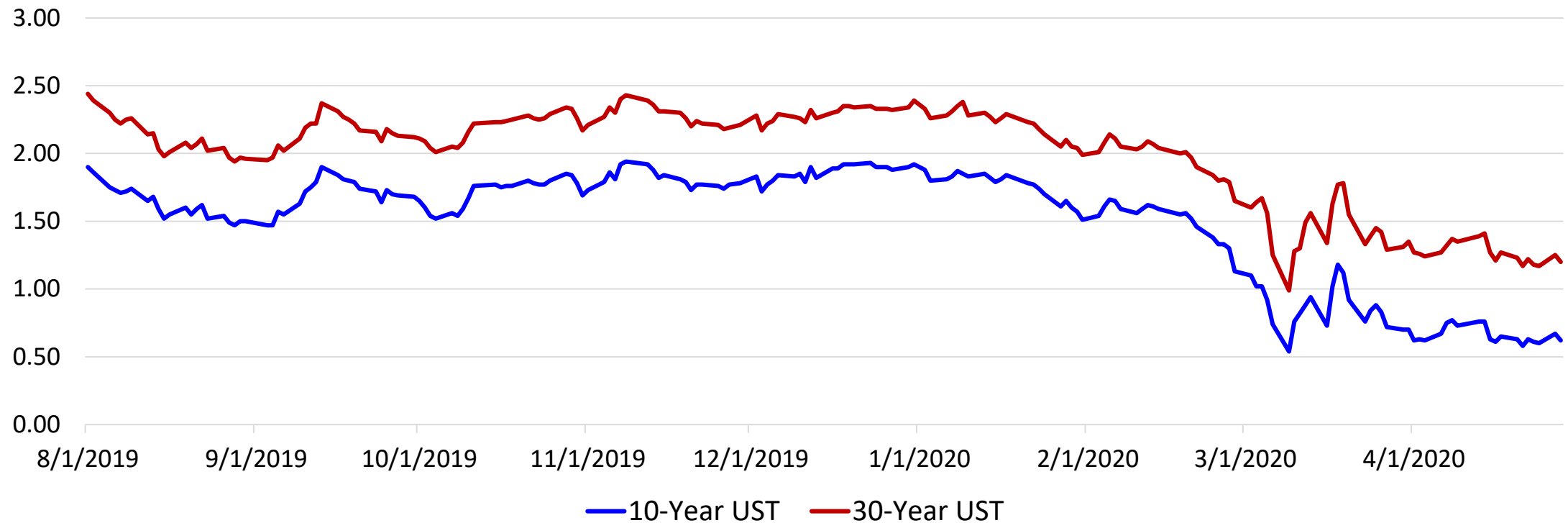
## 30-Year US Treasury (Quarterly)





# Fleeing to Long-Term Treasury Bonds

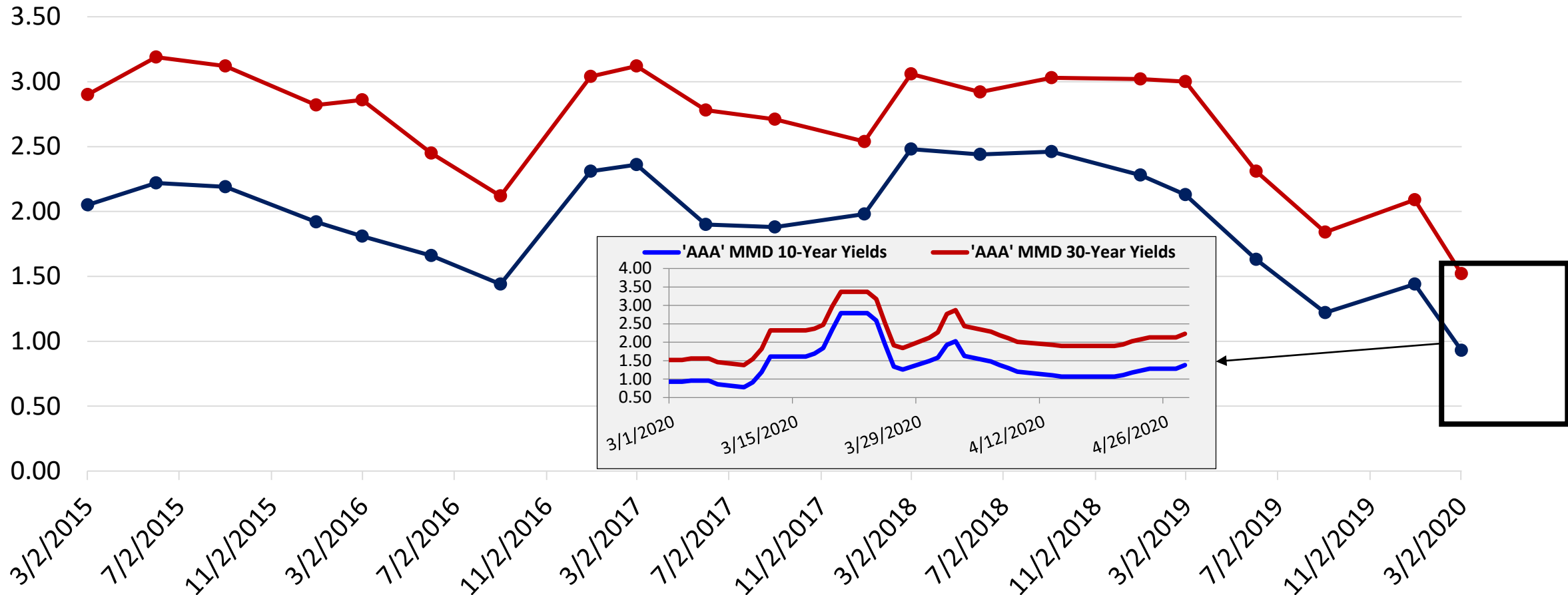
**U.S. Treasury Yields**  
*(August 1, 2019 – April 28, 2020)*



# Quarterly Historic MMD Yields

## Historic AAA MMD Yields (Quarterly)

10-Year MMD Yield    30-Year MMD Yield



# Stock Market Volatility

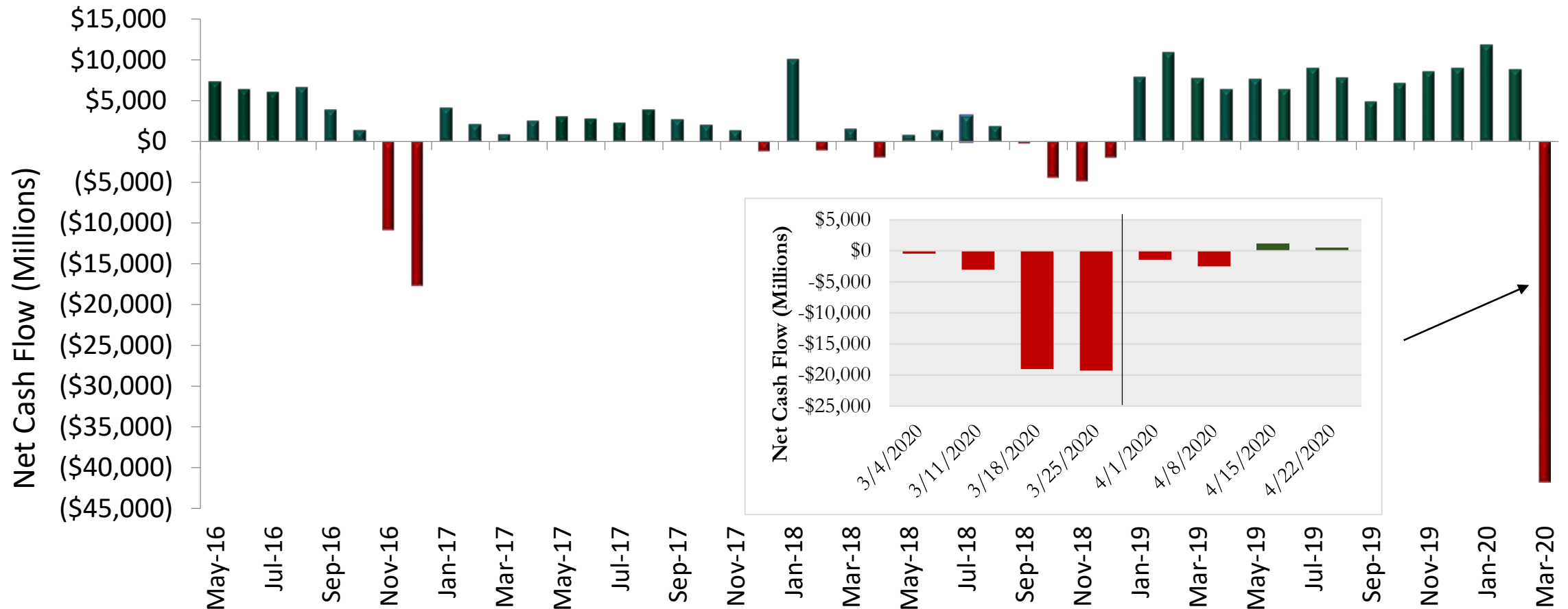
- SPDR S&P 500 ETF Trust
- Nasdaq Composite

3 months      6 months      YTD      1 year      **5 years**      Max



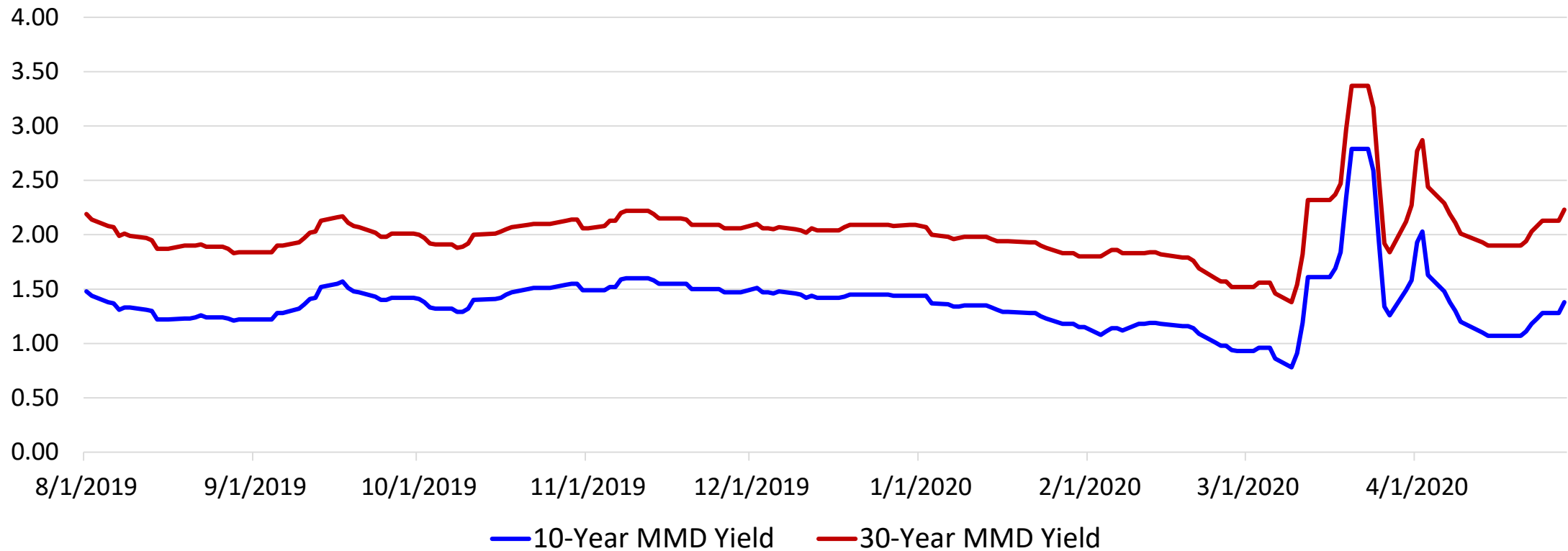
# Fleeing from Municipal Bond Market

## Municipal Bond Mutual Funds



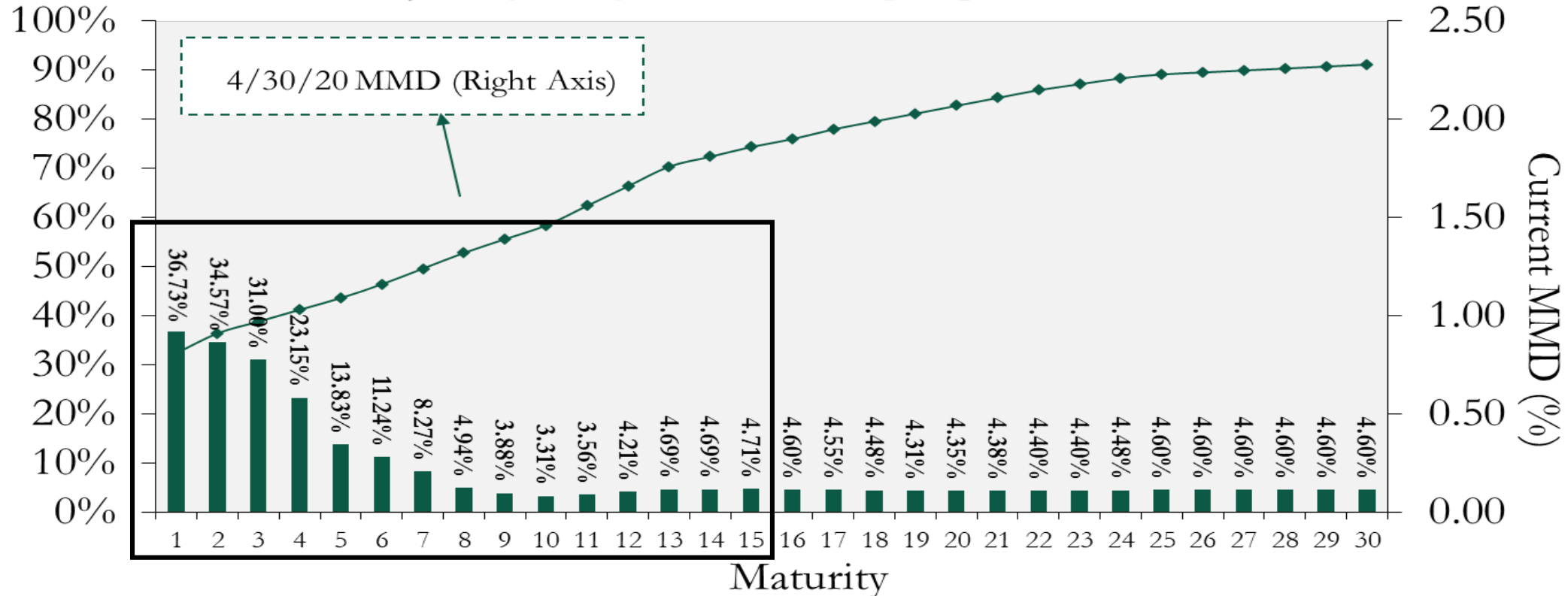
# Historic MMD Yields

**Historic AAA MMD Yields**  
*(August 1, 2019 - April 28, 2020)*



# Is Now a Good Time to Refund?

**Current "AAA" MMD and Percentage of Time Historical "AAA" MMD has been Lower than Current "AAA" MMD**  
*from January 2, 1998 through April 30, 2020*



# Refunding of Series 2011A

---

- Series 2011A is callable October 1, 2020 with ~\$17.1 million bonds outstanding
- Tax-exempt refunding can be completed through a private placement (issued directly with one private lender) or public offering
- In today's market, a private placement can generate ~\$142,000 annual cash flow savings versus ~\$146,000 annual cash flow savings with a public offering

## ➤ **Benefits of a Public Sale**

- Lower interest rates
- Shorter maturities have lower interest rates
- Longer final maturities than a private placement
- Most common form of debt issuance

## ➤ **Drawbacks of a Public Sale**

- Higher costs of issuance
- Longer timeframe to complete transaction and higher staff time to prepare required documentation (i.e. Official Statement)
- Initial and annual continuing disclosure
- Credit rating(s) required
- Typical call provisions of 10-year par call accepted by market

## ➤ **Benefits of a Private Placement with a Bank**

- Low costs of issuance
- No initial or annual continuing disclosure (Rule 15c2-12 not applicable)
- No credit ratings necessary
- Quick process to obtain loan
- Negotiable covenants including call features

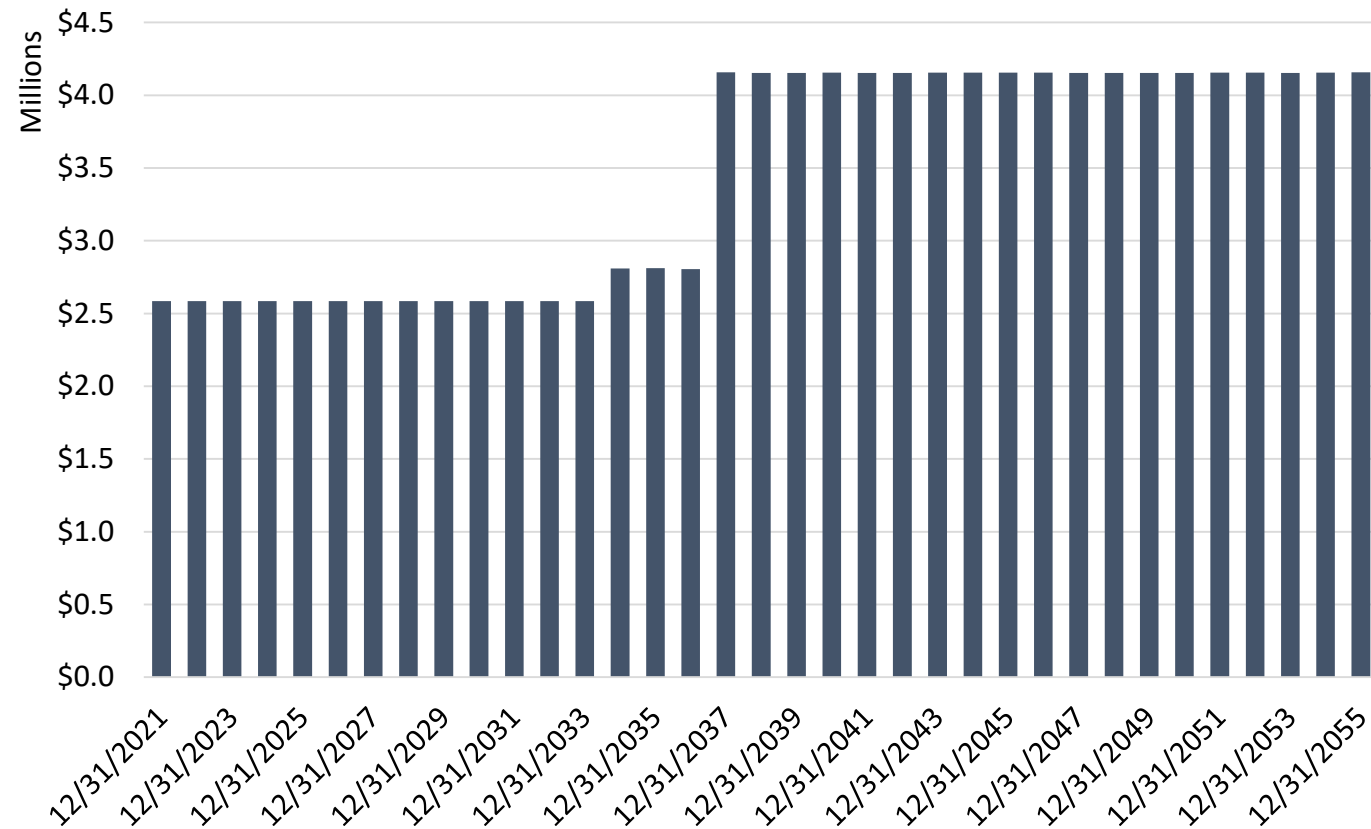
## ➤ **Drawbacks of a Private Placement with a Bank**

- Higher interest rates, depending on market conditions
- Requires formal credit approval from the Bank
- Only 15 – 20 year amortization schedules
- Not always available

Notes: Based on market condition as of April 28, 2020 and assumes AA+/AA- ratings. Assumes matched maturity refunding. Private Placement issuance assumes interest rate of 2.50%. Preliminary, subject to change.

# Potential New Money Issuance

**Projected 2020 New Money Issuance**



Financial Data	Revenue Bonds
Project Fund Total	\$61,725,180
True Interest Cost	3.80%
Maximum Annual DS	\$4,156,750
Average Annual DS	\$3,505,859
Total Debt Service	\$120,952,125
Term	35 Years

Notes:

Based on market condition as of April 28, 2020.

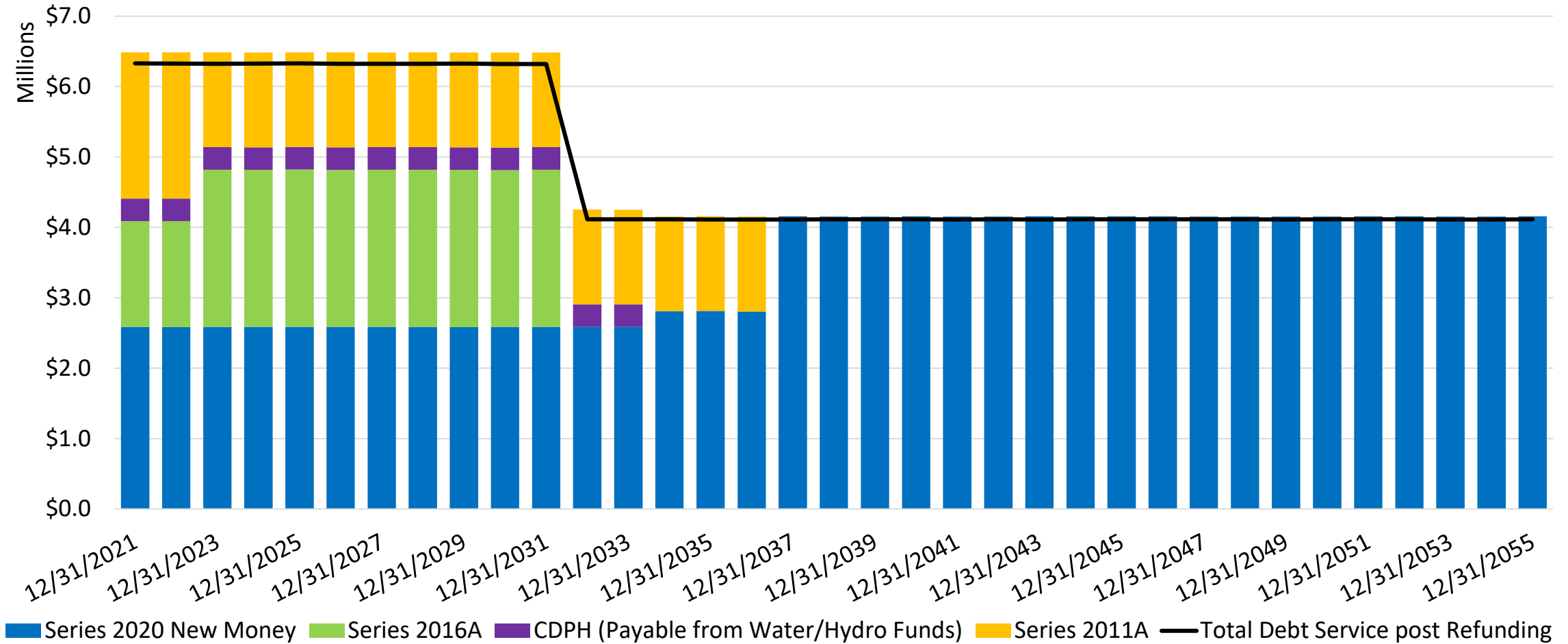
Assumes AA+/AA- ratings.

Assumes debt service is wrapped around existing debt.

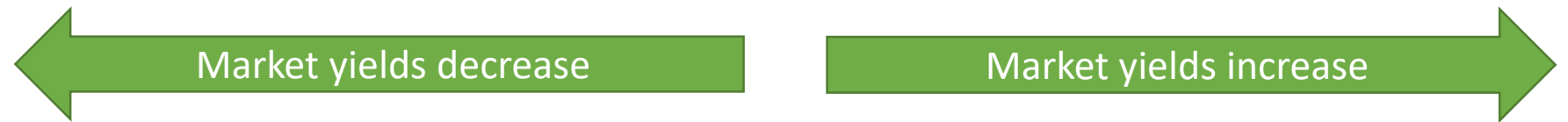
Preliminary, subject to change.



# Aggregate Debt Profile



# Market Rate Sensitivity to New Money Debt



Financial Data	Market –100bps	Market –50bps	Current Market	Market +50bps	Market +100bps
Project Fund Total	\$61,725,180	\$61,725,180	\$61,725,180	\$61,725,180	\$61,725,180
True Interest Cost	3.31%	3.55%	3.80%	4.05%	4.30%
Maximum Annual DS	\$3,864,125	\$4,007,125	\$4,156,750	\$4,309,875	\$4,466,875
Average Annual DS	\$3,245,696	\$3,373,543	\$3,505,859	\$3,642,036	\$3,782,319
Total Debt Service	\$111,976,500	\$116,387,250	\$120,952,125	\$125,650,250	\$130,490,000

Notes:

Based on market condition as of April 28, 2020.

Assumes AA+/AA- ratings.

Assumes debt service is wrapped around existing debt.

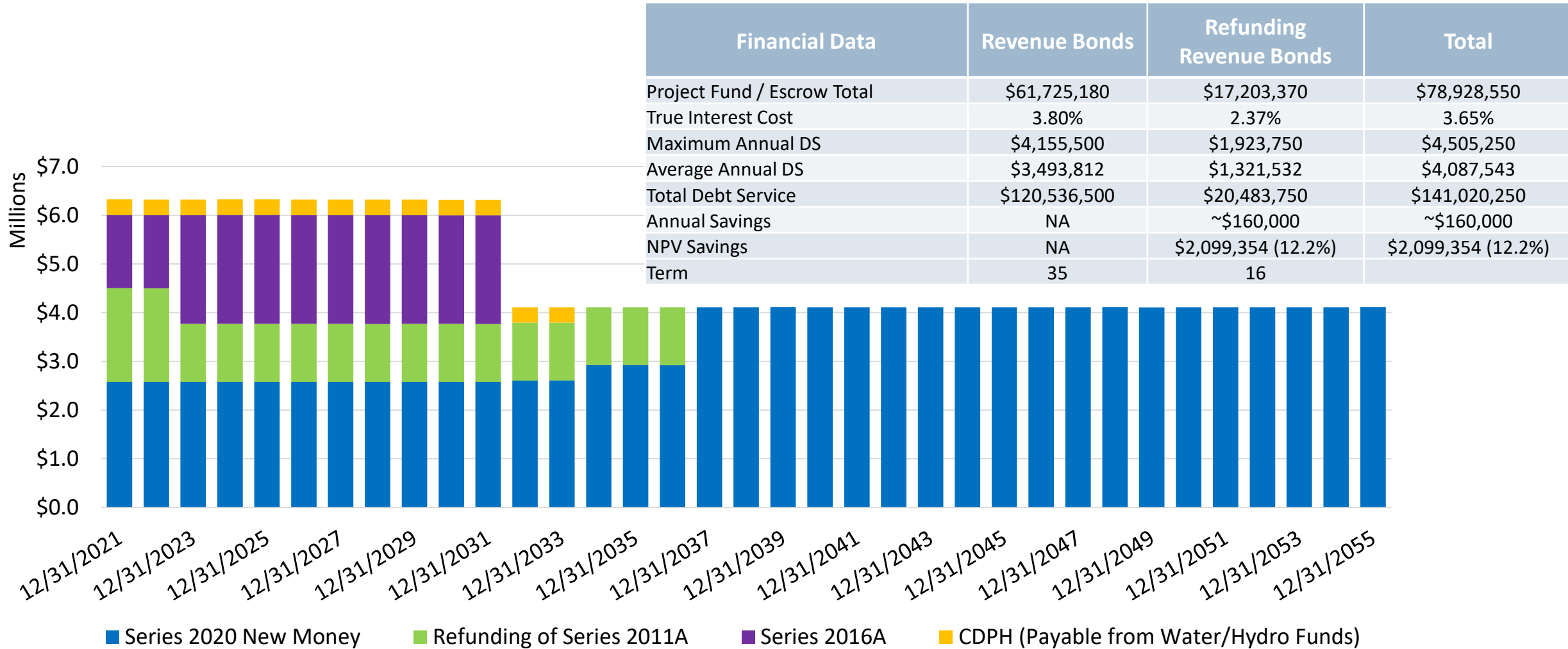
Preliminary, subject to change.

# Economies of Scale

---

- Were the Board to prefer the District to pursue a 30 or 35 year new money transaction, the refunding can be included in the issuance when issuing through the public market
  - Reduces the overall issuance costs by only entering the market once and increases the par size which may be more attractive to certain investors
- A combined issuance can potentially generate approximately \$160,000 in annual savings (\$2.1 million NPV savings)
  - Results in ~\$15,000 increase in annual savings

# Combined New Money Plus Refunding



**Notes:**

Based on market condition as of April 28, 2020. Preliminary, subject to change.

Assumes AA+/AA- ratings. Assumes debt service is wrapped around existing debt and matched maturity refunding.

# Disclaimer

---

These materials include an assessment of current market conditions, and include assumptions about interest rates, execution costs, and other matters related to municipal securities issuance or municipal financial products. These materials may change at any time subsequent to the date these materials were provided. The refinancing and refunding scenarios presented herein are not intended to be inclusive of every feasible or suitable refinancing alternative.

Fieldman, Rolapp & Associates, Inc. is an SEC-registered Municipal Advisor, undertaking a fiduciary duty in providing financial advice to public agencies. Compensation contingent on the completion of a financing or project is customary for municipal financial advisors. To the extent that our compensation for a transaction is contingent on successful completion of the transaction, a potential conflict of interest exists as we would have a potential incentive to recommend the completion of a transaction that might not be optimal for the public agency. However, Fieldman, Rolapp & Associates, Inc. undertakes a fiduciary duty in advising public agencies regardless of compensation structure.